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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,801

07/23/2003

Mark Pearson

23324

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7590

11/14/2006

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EXAMINER

TRAN, TUYETLIEN T

ART UNIT

PAPER NUMBER

2179

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,801

Applicant(s)

PEARSON, MARK

Examiner

TuyetLien (Lien) T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/14/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This application has been examined. The original claims 1-11 are pending. The examination results are as follows.

Information Disclosure Statement

1. The examiner has considered the documents listed in forms PTO-1449 submitted with the Information Disclosure Statements (IDSs) received on 10/14/2003 (see the attached forms PTO-1449).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 and 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the key cap" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitations "the text color" in lines 4 and 6. There is insufficient antecedent basis for this limitation in the claim.

Claims 9-11 are rejected as incorporating the deficiencies of a claim 8 upon which it depends.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Retter (Patent No 5,825,362; hereinafter Retter).

As to claim 1, Retter teaches:

A method of color encoding a computer keyboard (Fig. 7), comprising the steps of:

- (a) selecting, from the set of possible text colors provided by a computer, a subset of text colors for use in documents to be generated from the keyboard (see Fig. 7);
- (b) programming selected function keys to generate the selected text colors, each selected function key generating a different selected text color (see col. 8, lines 34-46 and Fig. 16 and step 46 in Fig. 2); and
- (c) color marking each selected function key with a color indicia indicative of the programmed text color of that key (note that various color indicia are marked on the function keys, see Fig. 7 and col. 7, lines 17-33).

As to claim 8, Retter teaches:

A computer keyboard optimized for generating multi-colored text documents (Fig. 7), comprising:

- (a) a plurality of programmable function keys that have been programmed to change the text color in a document when activated, each of said plurality of keys programmed to a selected color (see col. 8, lines 34-46 and Fig. 16 and step 46 in Fig. 2; note that programmable function keys can be program for any word processing program such as Microsoft Word, see col. 5, lines 31-37 and Fig. 16); and
- (b) color indicia on each function key indicative of the text color generated by the activation of that function key (note that various color indicia are marked on the function keys, see Fig. 7 and col. 7, lines 17-33).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-4 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Retter in view of Hoornweg (Patent No 4,755,072, hereinafter Hoornweg).

As to claims 3 and 10, Retter teaches the limitation of claims 1 and 8 for the reasons as discussed with respect to claims 1 and 8 above. However, Retter fails to expressly teach replacing the key cap with another cap having the programming text color. Hoornweg, though, teaches replacing the key cap with another cap having the programming text color (see col. 1, lines 29-32; note that the caps can be replaced on any subset of keys).

It would have been obvious to one of ordinary skill in the art, having the teachings of Retter and Hoornweg before him at the time the invention was made to have utilized the colored key caps as taught by Hoornweg to color encoding function keys as taught by Retter so that a color operation or selection readily can be made by the operator of the computer simply by selecting the corresponding key and further to improve efficiency in computer keyboard operation (see Hoornweg col. 1, lines 20-28).

As to claims 4 and 11, Retter teaches the limitation of claims 1 and 8 for the reasons as discussed with respect to claims 1 and 8 above. However, Retter fails to expressly teach overlaying the key with a fitted key cap having the programmed text color. Hoornweg, though, teaches overlaying the key with a fitted key cap having the programmed text color (e.g., see col. 1, lines 37-43). Thus, combining Retter and Hoornweg would meet the claimed limitation for the same reasons as discussed with respect to claims 3 and 10 above.

8. Claims 2, 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Retter in view of Harris (Patent No US 6,331,083 B1, hereinafter Harris).

As to claims 2 and 9, Retter teaches the limitation of claims 1 and 8 for the reasons as discussed with respect to claims 1 and 8 above. However, Retter fails to expressly teach color marking each selected function key with a paste-on decal representing the programmed text color. Harris, though, teaches color marking each selected function key with a paste-on decal representing the programmed text color (see col. 1, lines 31-37).

It would have been obvious to one of ordinary skill in the art, having the teachings of Retter and Harris before him at the time the invention was made to have utilized the key covers as taught by Harris to color encoding function keys as taught by Retter to provide the reusability capability and to improve efficiency in computer keyboard operation.

As to claim 6, Retter teaches the limitation of claim 2 for the reasons as discussed with respect to claim 2 above. Harris further teaches selecting a paste-on decal representing the programmed text color from a preprinted sheet of decals having a subset of the possible set of colors provided by the computer (e.g., a sheet three and one-quarter inches wide by five and one-half inches, see col. 2, lines 23-30; note that more than one color may be used in a given background, see col. 2, lines 1-3). Thus, combining Retter and Harris would meet the claimed limitation for the same reasons as discussed with respect to claim 2 above.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Retter in view of Microsoft Windows XP (screen capture from Microsoft Windows XP version 2002; hereinafter XP).

As to claim 5, Retter teaches the limitation of claim 1 for the reasons as discussed with respect to claim 1 above. However, Retter fails to expressly teach programming further comprises programming the twelve keys including the numbers "1" through "0" and "-" and "=". XP, though, teaches programming further comprises programming the twelve keys including the numbers "1" through "0" and "-" and "=" (note that a computer operator can assign any keyboard keys as shortcut to open a program including numbers '1' – '0' and '-' and '=', see XP page 2). It would have been obvious to one of ordinary skill in the art, having the teachings of Retter and XP before him at the time the invention was made to have utilized the function of allowing shortcut key to be assigned according to an individual's preferences as taught by XP to color encoding function keys as taught by Retter to improve efficiency in computer keyboard operation.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Retter in view of Microsoft WordPad (screen capture from Microsoft WordPad version 5.1; hereinafter wordpad).

As to claim 7, Retter teaches the limitation of claim 1 for the reasons as discussed with respect to claim 1 above. Retter fails to teach selecting colors from a

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drop-down screen. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the function of selecting colors from a drop-down screen, in view of Retter, because Retter suggests to the skilled artisan that a color encoded computer keyboard can be utilized in a common word processing program (see col. 5, lines 31-36) and further evidently shown by wordpad, a word processing program (see wordpad page 2) to conveniently selecting text color by visually and accurately selecting an item from a drop-down screen (see wordpad page 2).

Conclusion

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach key caps, key masks and keyboard shortcuts.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TuyetLien (Lien) T. Tran whose telephone number is 571-270-1033. The examiner can normally be reached on Mon-Friday: 7:30 - 5:00, off on alternating Friday.

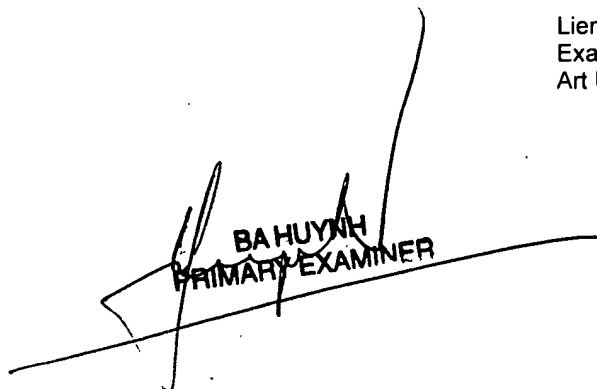
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T.T
11/07/2006

Lien Tran
Examiner
Art Unit 2179


BA HUYNH
PRIMARY EXAMINER